

gets  
rdict  
COCKELL

from the farm at  
dian heavyweight  
at Harringay last  
Bruce Woodcock's

will be otherwise  
the idea of putting



ERS WE KNOW GET  
ST NIGHT - DEAR ?

n Harris  
es it 5-0

ish women's squash  
team regained the  
Cup by defeating  
at the Lansdowne  
on yesterday.  
time the home girls  
came off a game in  
a match, when brunettes  
outplayed Joan Harris  
ed well to take the next  
and win the match 5-4.  
squash of the day came  
W. H. Gordon (formerly  
the, whose powerful shots  
Ann Jackson on the  
again (Surrey), the new  
impion, easily mastered  
in the top match, while  
and Mrs. Betty Hutton,  
minis stars, both showed  
form.

John Trim,  
ds Guiana

WN, Tuesday.—British  
West Indies Board asking  
ision of fast bowler John  
in the England tour this  
for the England tour this  
sh Guiana board, empha-  
value of a fourth fast  
to pay the extra cost  
the Guiana board, be-  
finance another player.  
next John, the call him  
in West Indies Test how-  
is in India and against  
the West Indies. He has  
a created dissatisfaction  
Guiana and in the West  
Indies.—Exchange.

beat Louis'

Tuesday.—Ezzard  
the heavy-weight cham-  
pion, defeated today  
the National  
champion, claimed today  
his decisively beat, Joe  
Louis, champion, if Louis  
return to the ring.  
the fight, the baby  
and a perfect  
light jabs.—A.P.

Harris—No. 1

Today.—Reynold Harris,  
the best all-round cyclist  
in the world, today  
today. Express Staff

VIDENDS  
HE P.P.A.  
BY 25, 1950.

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# DAILY EXPRESS

No. 15,509

THURSDAY MARCH 2 1950

CONTROLLING SHAREHOLDER  
LORD BEAVERBROOK

Weather: Fair or fine

One Penny

**ATOM 1** 'Man in the know'  
helped Russia on

**ATOM 2** 'The Fox' made no  
mistake in 7 years

**TEA** Price going up—supplies  
going down

**ATTLEE** Socialists told: Revolts  
are luxuries now

## FUCHS GAVE BOMB TO RUSSIA

### Survived purges by and got promotion CLEVEREST SPY EVER KNOWN

By CHAPMAN PINCHER

**IN 90 minutes at the Old Bailey yesterday, a riddle was solved: How did Russia make the atomic bomb so quickly? Dr. Klaus Emil Julius Fuchs, confidant and leading member of Britain's atom team, who began a 14-year jail sentence last night, gave them the know-how.**

### Attlee will take it and cling on

By GUY EDEN

**AS M.P.s assembled at Westminster yesterday for the first time, Tories were calling this the Turn - The - Other-Cheek Government.**

It became known that the Government intends to put up with almost any rebuff, so as to remain in office as long as possible.

At the same time the Tories will not try to bring down the Government for some months at least - unless they are deliberately provoked by some controversial issue.

The belief was held in the lobbies last night that the Government may hold office into next year.

At a meeting of Socialist M.P.s yesterday before Parliament assembled, Mr. Attlee and Mr. Herbert Morrison both stressed that absolute discipline is essential.

**Defy them? No**

A back-benched ally of Mr. Aneurin Bevan urged the Government to go forward with its full socialisation policy, defying Tories and Liberals to bring it down.

He received practically no support. Mr. Morrison told the M.P.s: "You can't afford the luxury of revolts."

It is now the policy of the Government, with the support of the back-benchers, to avoid defeat whenever possible by trimming their policy. Any defeats that are inflicted will be ignored, unless they are on vital issues.

Even the rejection of Government Bills will not be taken as a cause for resignation unless the Cabinet says so in advance.

The Cabinet will avoid any new socialisation proposals there will be no Bill to take over the sugar, cement, and meat trades.

One decision that has to be made is whether back-benched members will have the right to bring in Bills. If they are given the right, some back-bencher may bring in a Bill to repeal the Act.

Opposing the steel industry, passed by the last Parliament. That could bring a crisis for the Cabinet.

**Save them? No**

But Tory tactics will be to keep the Government in office to deal with economic and financial difficulties which may stem from the expected reduction of Marshall aid.

It is argued that during the election campaign, members of the Cabinet made extravagant claims about handling the difficulties, and that they should not be rescued from having to make these good.

Mr. Churchill addressed a meeting of the Opposition on the 1921 Committee - yesterday, emphasising, according to an official statement, that the Opposition must have regard to the national interests and the legislative proposals of the Government when disclosed.

The is taken to mean that there will be an understanding to pass essential financial business, and, so long as there is no socialisation in the King's Speech next week, to refrain from putting up any hostile amendment.

Mr. Churchill saw the King last night at Buckingham Palace. It is believed that the King wanted to hear his views on the situation.

**POCKET CARTOON**  
by OSBERT LANCASTER



"—And for heaven's sake stop looking on the bright side and saying 'It might have been Summerskill'."

Almost from the first exciting moments in 1942 when British scientists were proving an atomic bomb was feasible, Fuchs had been fully in the know.

After release from 18B internment he joined another, ex-German, Berlin-born Professor Rudolf Peierls, at Birmingham University. The value of the knowledge he built up at this stage is shown by this official statement:—

"Professor Peierls, assisted by Dr. Fuchs and others, used the experimental data provided by Liverpool and Cambridge to calculate the critical size of the bomb. They examined the mechanics of the reaction, and calculated the amount of energy likely to be released in an atomic explosion, studying the conditions for increasing the amount."

### THE KREMLIN'S GUIDE

The reports Fuchs helped to prepare—and may have passed on to Soviet agents—had abstruse titles like "Critical radius and time constant of a sphere embedded in a spherical scattering container."

To his scientific counterpart in Moscow such titles promised more detailed evidence of the shape and size of the explosive atom-bomb core.

For two years—1944 to 1946—Fuchs worked in America's Los Alamos atom station, where the bombs were designed and built.

There he picked up those secrets of bomb mechanics about which the Americans are most sensitive.

Since then he has been at Harwell, in Berkshire—the hub of British atom research. As head of the theoretical physics department the latest experimental results from many of the most closely-guarded laboratories would be funnelled to him.

### THE KREMLIN'S EAR

How did Fuchs survive security purges to become the most successful spy in history?

On his own confession he has been for seven years the Politburo's representative inside the most secret atomic establishments of the West.

He was the Kremlin's ear at many confidential conferences. With the steady stream of expertly selected facts he admittedly supplied, the Russians can never have been behind.

Yet only nine months ago, while lesser intelligences were being combed out of defence jobs for long-past membership of the Communist Party, Fuchs was promoted. He was given a £1,800-a-year job.

The inescapable fact is that Fuchs, the brilliant physicist, this man whose name in German means The Fox, was the cleverest spy who ever operated in Britain. In seven active and dangerous years he never made a mistake.

The trail that led to his arrest was picked up during routine counter-espionage in the U.S.

Only when he felt the slackness of the security net being taken up did he show the brittle signs of the amateur agent.

### HE CONFESSED

Where a more harshly disciplined spy would have kept quiet, he panicked to Harwell security chief Henry Arnold with a confession. He said that "he had communicated a great deal of information to the enemy."

Fuchs did not hand on his secrets on the principle that scientists have a sacred duty to spread their discoveries. On his own initiative he contacted Russian agents for the precise purpose of furthering the expansion—at whatever cost to the rest of the world—of Stalin's Communism.

Fuchs had not altogether escaped security attention.

A picture of the top ten scientists

**PAGE TWO, COL SIX**

**GIRL COUSIN IN GREEN ASKS**

**'LET ME SEE HIM'**

Express Staff Reporter

**A SAD-FACED woman in a green coat and green polka dot scarf watched the Old Bailey drama of Fuchs yesterday from a bench behind the dock. She wept when she heard the sentence.**

The woman is Miss Giesler Wagner, a cousin of Dr. Fuchs's, his only known relative in Britain.

She left the court in the arms of Mr. T. Gardner Catchpool, Quaker visitor at Brixton Prison. He tried to comfort her and waited in the corridor while she asked if she could see Fuchs.

She was told to apply to the Prison Commissioners for permission.

**BLINDS DRAWN**  
They were still in the corridor when Fuchs was driven off in a police car with blinds drawn.

Miss Wagner has been living with friends at Ormonde-rise, Buckhurst Hill, Essex. She is a student teacher.

Mr. Catchpool said last night: "I have known the Fuchs family for years. Mr. Fuchs senior is a member of the Society of Friends and met him many times in Germany before the war."

"I represented the Friends in Berlin before the war. Fuchs was then at school. He has

### EFFECT OF A SCATTERING CONTAINER ON THE CRITICAL RADIUS AND TIME CONSTANT

**K. Fuchs.** **SECRET**  
**1. Introduction**  
We consider in the following the critical radius and the time constant of a chain reaction in a sphere surrounded by a spherical container. We assume essentially that the mean free path is the same in the sphere and the container. For some purposes

THIS is the sort of information Fuchs passed on . . . Title page of a Government report on research to discover the best shape and size for the explosive core of an atom bomb. Prepared by Dr. Klaus Fuchs in 1943 for the British atom project—then code-named Tube Alloys—it is no longer secret.

Consider now a very thin container and put  
(8.3) 
$$f(r) = f_0(r) + f_1(r) \delta r_2$$
$$\rho = \rho_0 + \rho_1 \delta r_2$$
$$\delta r_2 = r_2 - r_1 \ll r_1$$
  
Subtracting (8.2) from (8.1) and retaining only terms of first order in  $\delta r_2$  one finds  
$$f_1(r) = \frac{1}{2} \rho_0 \int_{r_1}^{r_2} \chi(r, r') f_0(r') dr' + \frac{1}{2} \rho_1 \int_{r_1}^{r_2} K(r, r') f_0(r') dr' + \frac{1}{2} \rho_0 \rho K(r, r') f_0(r_2)$$
  
Multiply (8.4) with  $f_0$  and integrate over the sphere; using the

From the same Government report . . . showing the intricate mathematical equations and the symbols in which Fuchs dealt.

**separation potential gained in producing the final lost in re-mixing. In any one unit the gain (1.6)**  
$$\sum \frac{b_0 \delta_0^2}{2(1-\delta_0)^2}$$
  
That lost by re-mixing is  
$$\sum \frac{b_0 (\delta_0 - \mu \frac{d\delta_0}{d\mu})^2}{2(1-\delta_0)^2}$$
  
Hence the difference is  
$$\sum b_0 \mu \left( \frac{d\delta_0}{d\mu} - \mu \frac{d^2 \delta_0}{d\mu^2} \right) \frac{d\delta_0}{d\mu}$$

Top-secret calculations by Klaus Fuchs and Professor Rudolf Peierls to decide the best type of plant for making uranium 235—the atomic explosive used in the Hiroshima bomb. The problems involved the use of the most specialised mathematics.

### SINGLE WORD IN CODE BETRAYED FUCHS

By PERCY HOSKINS

**A CODE name scrawled in a diary is believed to have started detectives on the trail which led to the arrest of Dr. Fuchs.**

How the diary came into the hands of Secret Service officers in New York will not be disclosed "not now or ever," say the G-men—but when the authorities saw the code name pencilled on one of its pages, mystery was solved.

The same name was mentioned in the case of Dr. Alan Nunn May, now serving 10 years for giving away atom secrets.

Arrangements were made for a meeting between Nunn May and a Russian agent outside the British Museum, where the agent was to identify himself with the code name after asking the way to the Strand.

Other entries in the diary—some in code—helped the investigators to trace the atom leakage to Fuchs. Spies are recruited from inconspicuous types of people, and it is usually a seemingly trivial detail like this scrawled name which first attracts the counter-espionage agents.

**24-HOUR WATCH**  
Once a man is suspected of spying, he is never lost sight of. Relays of watchers note the people he contacts. They too are followed.

Nunn May's house in Stafford Terrace, Kensington, was under observation from October 1945 till February 1946, when he was arrested. From the moment he left home in the morning until he returned at night, he was never out of the watchers' sight.

As the date for his meeting with the Russian agent at the British Museum approached, unobtrusive men began to loiter in rooms in Museum-street, with first-floor windows looking on the museum's forecourt.

Every inch of the chosen rendezvous was covered by one or two observers.

**Test on loyalty**  
WASHINGTON, Wednesday.—A loyalty test for foreign scientists has been written into a Bill passed by the House of Representatives today.

**Plane baby cost £17 6s. 8d.**  
The air ambulance in which Lechlan McNeill Macfarlane was born on Tuesday cost £17 6s. 8d. for its 15-minute flight from Tice in the Hebrides to Glasgow. The bill will be paid by the Health Service.

**Nylons, madame?**  
Post Office police visited houses in Goodmayes, Essex, last night asking people to identify nylons and other articles. Many Christmas parcels for Goodmayes failed to arrive. Earlier, police questioned a temporary postman.

**100 queue to help**  
A hundred friends and relatives of 26-year-old George Kilham queued at a Sheffield blood transfusion centre yesterday after an appeal for donors. But Kilham died. He had a rare blood disease.

**PRIZES FOR PARENTS**  
At the next speech day at Hawes Down School, West A Wickham, Kent, prizes will be awarded to parents. More than 200 of them will enter competitions for painting, knitting, embroidery, and say, or their party pieces.

### DEARER TEA—AND CUT IN RATION?

Express Staff Reporter

**TEA prices are likely to rise, perhaps by 1s. 6d. a lb., a London tea broker said yesterday.**

"He expects the jump, because of a Government bulk contract to twenty million lb. in Ceylon—which may threaten half an ounce of the 24oz. tea ration."

Ceylon wants to cut what she sends us from 130 million lb. to 100 million lb.—and charge more.

With the subsidy pegged any increase would be passed on to the housewife. At present she pays an average 3s. 4d. a lb.

The subsidy saves her 81d. a lb.—and costs the country £25,000,000. The Food Ministry may consider restoring free buying and reopening London's tea auction mart.

**Milk sales drop—too dear?**

People are drinking less milk since it was de-rationed on January 15. Consumption has fallen from the three pint ration to two and a half pints a week.

An official of the National Dairy-men's Association said: "Maybe it is too dear at 4s. a pint."

**No petrol rush**

CANBERRA, Wednesday.—Petrol stocks in Australia have risen by 14 per cent. since the Tory Government took office. Fuel Minister McCleay says: "Consumption has risen little since rationing ended."

**BRIDES KICK CLERKS AT AIRPORT**

Express Staff Reporter: New York, Wednesday

**WOMEN screamed and kicked and men shouted and pounded their fists on counters today when it was announced at Idlewild, New York's airport, that Flight No. 100—for London—would be delayed indefinitely.**

Fifty-seven passengers were waiting to board the plane. They had waited two days.

Men and women—some of them war brides—advanced on the clerks in the Pan-American baggage-collecting office.

One of the women, Mrs. Margaret Scholz, returning to Britain to see her mother who is ill, put her year-old baby into a "cuddly" arms. "Here," she said, "You take care of him. I have been doing it for two days."

Some of the women kicked out at the clerks.

The passengers made a start for London—an hour and a half late—on Monday. But the plane had engine trouble and turned back.

**WAITED ALL DAY**

Passengers were put up for the night in an hotel. Yesterday they went back to Idlewild and waited all day. But still the plane would not fly.

Then they heard Pan-American was sending a plane to London, but it was small and was for luxury fare payers only.

Trouble broke out. Officials became so harassed that they put Mrs. Scholz and another war bride, Mrs. Daisy MacAndrews, and two children in the "full" plane.

Others went out two hours later—just a minute or two before the police arrived to restore order.

**I know something of envoy's death**

NEW YORK, Wednesday.—Russell McKichan, a young American student on his way to New York to join the Queen Mary, said by radio-telephone tonight: "I have important information about the death of Captain Eugene Karpe, a 60-year-old U.S. naval attaché in Bucharest, was found in an Austrian railway tunnel, McKichan said with him on the train."

Express News Service.

**Mr. Joint delays meat talks**

Anglo-Argentine negotiations on meat trade were due to start in Buenos Aires yesterday. But Mr. Edgar A. Joint, Commercial Minister to the British Embassy in Buenos Aires, said: "I imagine he has been delayed by the election."

**Play snooker? Try this one**

Joe Davis, 49-year-old former world snooker champion, made a record break of 145—one short of the maximum—against George Chenier, a Canadian, at Manchester last night. Chenier put up record of 144 three weeks ago.

**Bar put on comic supplements**

Comic supplements of U.S. and other newspapers are to be put under import restrictions next Wednesday, it is announced today. In 12 months \$200,000 in dollars has been spent on importing U.S. newspapers to re-sell their comic supplements as separate papers.

**Toothache day**

A man whose vote was used by someone else at the General Election told Loughborough court yesterday: "I had toothache and didn't care who voted."

**Fight with oranges**

Undergraduates of rival Oxford colleges, which face each other, Jesus and Exeter—fought a battle with jugs of water, oranges, and tins for half an hour last night.

**PRIZES FOR PARENTS**

At the next speech day at Hawes Down School, West A Wickham, Kent, prizes will be awarded to parents. More than 200 of them will enter competitions for painting, knitting, embroidery, and say, or their party pieces.

### Judges step up jail for violence

Express Staff Reporter

**JUDGES going on Assize have been recommended to pass heavier prison sentences on men and youths convicted of serious cases of violence.**

Lord Goddard, the Lord Chief Justice, called a meeting of judges in his private room at the Law Courts to hear the proposal.

The step was taken because of the increase in the number of cases of violence.

The Food Ministry may consider restoring free buying and reopening London's tea auction mart.

**4.30 a.m. LATEST**